

tenuato, acutiusculo, ad dextram leviter verso; apertura subrotundato-ovata, intus albida nitente.

Long. 6, lat. 4, alt.  $2\frac{1}{2}$  mill.

Habitat in regione Matelle Ceylanica.

Two specimens were procured by Mr. F. Layard from the Lagalle division of the Matelle district. This is the first species of the genus which has been found in Ceylon. It is related to the European *A. fluviatilis*, but may at once be distinguished by the elevated radiate ribs which occur at short intervals and, equally with the depressed spaces, are marked longitudinally with the minute ribs at their sides.

M. Bourguignat represents *Ancylus Baconii* as occurring in Bengal. *A. Verruca*, Bens. (Annals for January 1855), taken by me at Bhimtal, and by Dr. Bacon and myself in Rohilkhand, and which was found by Mr. Theobald in Orissa, is the sole Indian species decidedly known. I strongly suspect that M. Bourguignat's species is that which was taken by Dr. J. F. Bacon at Henley Park, six miles from the Darling Range, in West Australia.

Cheltenham, Dec. 26, 1863.

*Erratum.*—In 'Ann. & Mag. Nat. Hist.' for December 1863, p. 427, line 11 from top, for "parietal" read "columellar."

XVIII.—*Notes on some Molluscos Animals from the Seas of China and Japan.* By ARTHUR ADAMS, F.L.S. &c.

"THERE is in shell-fish something more to consider than their shells," observes wise old Adanson; and indeed we are all aware that a knowledge of its testaceous envelope is not always sufficient to determine the natural position or affinities of a mollusk. I lately placed my genus *Scaliola* with the "Wentletraps," and associated my *Diala* with *Planaxis*; *Fenella* also fared no better, and was regarded by me as a Pyramidellid. On becoming acquainted, however, with the animals of those genera, I have been enabled, by means of the 'Annals,' to refer them to their natural families; and as any account of these molluscos creatures, written down from careful observation on the spot, must be of interest, I have thrown together some of my notes for insertion in your Journal. The photographic art may some day be applied to portray the forms of the Mollusea: in the meantime, accurate drawings should not be despised; and I trust at some future period to be able to reproduce a few of mine of the mollusks of Japan.

*Photinula quasita*, A. Ad.

*P. testa orbiculato-conica, imperforata, spira elatiuscula, regione*

umbilicali valde impressa, umbilico callo albo obtecto; carneo-rufescenti, ad suturas radiatim castaneo nebulosa, ad peripheriam maculis obliquis albis castaneisque ornata; anfractibus  $5\frac{1}{2}$ , convexis, transversim liratis, liris superioribus moniliformibus, inferioribus simplicibus; anfractu ultimo ad peripheriam rotundato-angulato; apertura subcirculari, intus sulcata et vivide iridescente. Lat. 9 lin., alt. 7 lin.

*Hab.* Aniwa Bay; 17 fathoms: Tatiyama: Kino-O-Sima.

This is a large and handsome species, with the upper thread-like ridges of the whorls beaded, and the lower ones simple. It is of a reddish flesh-colour, blotched and variegated with pale chestnut at the sutures and periphery.

The animal has a large prominent muzzle, bearded at the end. Head-lobes none. Tentacles prismatic, flat above, beset with short cilia, and lined with red-brown. Eyes on dull black bulbs with small bright black pupils at the end of subtruncate white swellings, supported on thick cylindrical white pedicels. Neck-lappets large, the left white, plain-edged, notched near the eye-pedicel, and involute; the right also white, but festooned and with the margin shortly ciliated. Lateral filaments with short cilia, four on each side, each with a red-brown line down the middle. Mantle-margin finely papillose, and shortly reflexed over the front edge of the shell. Foot milky white, speckled and reticulate with red-brown (the same colour as the markings on the shell), very long, powerful, and thick, acuminate behind, truncate in front, with two little slender tentacular filaments at the angles, prismatic behind the operculum, where it is flat above, with two prominent ridges at the angles; margin of sole shortly ciliated.

The animal often greatly extends the foot, and uses it as a lever to turn over and regain its original position.

*Serpulus Adamsi*, Mörch.

The animal is pale pearl-white, minutely flecked with opaque white. The tentacles are flattened, short, and somewhat triangular, bearing a minute sessile black eye at their outer bases, just within the commencement of the neck-lobe. The under edge of the tentacles and the neck-lobe are adorned with regular rather distant yellow dots, forming the pupils of as many olivaceous eye-like spots. The head is green, sprinkled with white, and with a vertical groove extending down the middle. The head is very long, gradually growing narrower, and ending behind in a tapering point, and in front in a short and rounded muzzle.

The foot is large, fleshy, hollow at the sides, and spotted near the fore part with olive-green. At the lower edge there is a

sharp prominent keel, articulated with white and dark green. This angular ridge separates the hollow sides from the flat lower portion, which is of a dull pinkish white. The sole, or small anterior membranous portion situated in front of the head, is of a pale white, and the broad circular expanded disk is marbled with olivaceous, the edges being prettily spotted with dark green and white.

A favourite attitude is one in which the position of the animal in its tubular shell is reversed, and the disk of the foot applied against the upper edge, the concave sides forming two hollow channels to conduct the water to the gills, thus performing the office of siphons. This beautiful creature is common along the shores of Manchuria and Japan, where it adheres to the tidal rocks. My examples were obtained from 7 fathoms' water at Mososeki, in the Inland Sea or Seto-Uchi. The same species has recently been described by Dr. Dunker, in his 'Mollusca Japonica,' as *Serpulorbis imbricatus*.

*Pilidium commodum*, Midd.

In a sandy bay of Saghaleen, near Cape Notoro, great masses of *Laminaria* were thrown up in heaps on the beach after a tremendous gale; and it was during an examination of the rich stores of shipwrecked and stranded animal remains that I found several specimens of what I believed to be an undescribed shell. Being at the time unacquainted with Middendorff's *Pilidium commodum*, I named my shell *Capulus depressus*, under which name it is published in the 'Annals' for 1860.

According to Middendorff's description, the animal does not differ from that of *Capulus*; but perhaps the extremely depressed form of the shell may allow *Pilidium* to remain as a subgenus of *Capulus*. In the 'Spitzbergen Mollusca' of Otto Torrell (p. 88) it is stated that Prof. Lovén has named this shell *Piliscus probus*, altering the name *Pilidium* because Prof. E. Forbes had used it for *Iothia*; though why he should have altered the specific name also is not stated. *Pilidium* of Forbes, however, or *Iothia* is the same as *Lepeta* of Gray; so that *Pilidium* of Middendorff should still be employed for this northern *Capulus*. Hisinger, according to Torrell, described the same shell in his 'Lethæa Succica' as *Capulus Hungaricus*; and Torrell himself proposes to call it *Piliscus commodus*.

*Eburna japonica*, Reeve.

In this species the tentacles are ringed with red-brown, and speckled with light yellow; and the siphon is spotted with yellowish white, and irregularly banded with red-brown lines. The foot (long, large, thick, and fleshy, like that of *Buccinum*) is

transversely banded with irregular red-brown lines and minutely spotted with pale yellow. The sole is also edged with pale yellow. At the caudal extremity of the foot there is a single conspicuous cylindrical terminal filament. I obtained living specimens from 35 fathoms, off Tsu-saki, in Japan.

*Cancellaria Spengleriana*, Desh.

The latest account of the animal of *Cancellaria* I have seen is given by Dr. Gray in his 'Guide to Mollusca.' It is very vague and imperfect; but the true position, I believe, is there suggested to be in close vicinity to *Mitra*.

In *Cancellaria Spengleriana* the tentacles are broad, flat, triangularly subulate, wide apart, separated by the base of the retractile proboscis. The eyes are small and black, and are placed on slight tubercles at the outer bases of the tentacles. The mantle is furnished with a small siphonal fold. The foot is large, flat, truncate in front, with short side-angles, and acuminate and produced behind. Operculum none.

The tentacles of this species are rendered dark nearly as far as the eyes by close-set small red-brown dots; the siphonal fold of the mantle is sparsely spotted with the same; both dorsum and sole of the foot are reticulate with red-brown lines, and dotted with the same colour.

The animal is very shy, rarely showing more than the tips of the tentacles beyond the front edge of the shell. It has the power of considerably extending the fore part of the foot, using it as an exploring organ.

*Turcica instricta*, Gould.

I observed the animal of this shell at Satanomo-saki, where I dredged living specimens from a depth of 55 fathoms. It is the *Trochus instrictus* of Gould originally, then a *Monodonta*, afterwards (*Otia Conchologica*, p. 245) a *Euchelus*. It has, however, the tortuous columella and general characters of my genus *Turcica*, founded in 1854 upon a large species from Australian seas. My *Monodonta angulifera*, from the Philippines, is an allied but quite distinct species; and I have recently described a few others. These smaller *Turcica* with the outer lip sulcate have been separated by my brother and myself, in our 'Genera,' as a subgenus of *Euchelus*, under the name of *Perrinia*. It would, however, have been more correct to have placed them under the genus *Turcica*.

In this animal the head, neck, and upper part of the body are finely reticulate with light brown, and the tentacles and siphon are minutely speckled with opaque white. The tentacles are long, white, and semipellucid; the eyes are large and black,

at the tips of short stout pedicels. The head-lobes are small, white, and pectinate. The foot is very small and narrow. Unfortunately, owing to a gale suddenly springing up and capsizing my arrangements, I was unable to note any peculiarities of the neck-lappets and lateral filaments.

*Glyphis quadriradiata*, Sow.

An examination of the animals of P. P. Carpenter's group of Fissurellids, which he has appropriately named *Glyphis*, on account of their beautiful sculpture, is the more important as they cannot from their shells alone be distinguished from *Lucapina* of Gray, with which, in our 'Genera,' my brother and myself have associated them.

The animal of this species is semiopaque, milk-white. Tentacles moderate; eyes large and black, on prominent tubercles at their outer bases. Muzzle short and rounded. Mantle double-edged, the outer or upper margin simple and plain, and just turned over the edge of the shell, the lower forming an expanded membranous curtain, fissured in front, extending considerably beyond the shell, and overhanging the foot; the margin plain, simple. Sides with a row of short, opaque-white, conical papillæ (nine on each side). Foot ovate, moderate, rather acuminate behind. The species occurs in Japan; but my living animal was dredged from 29 fathoms, stones and shingle, in a tide-race at the extreme point of the Regent's Sword.

XIX.—*Contributions to an Insect Fauna of the Amazon Valley.*

COLEOPTERA: LONGICORNES. By H. W. BATES, Esq.

[Continued from p. 56.]

Genus SERIPHUS, nov. gen.

Body oblong-ovate, convex, setose. [Forehead and muzzle short, as in the *Leiopodinæ* generally. Antennæ elongated, hair-like, setose both above and beneath. Thorax convex; lateral spines tuberculiform, and placed behind the middle. Elytra free from tubercles and ridges, obtusely truncated. Legs moderate; thighs clavate; basal joint of hind tarsi about equal to the two following taken together.

♂ Apical ventral segment obtusely rounded; dorsal sharply truncated, with the angles distinct.

♀ unknown.

The species which constitutes this genus would probably be better placed in a section or subgenus of *Sporetus*. It differs greatly from the *Sporeti* in colour, being of a rich changeable silky-green hue.